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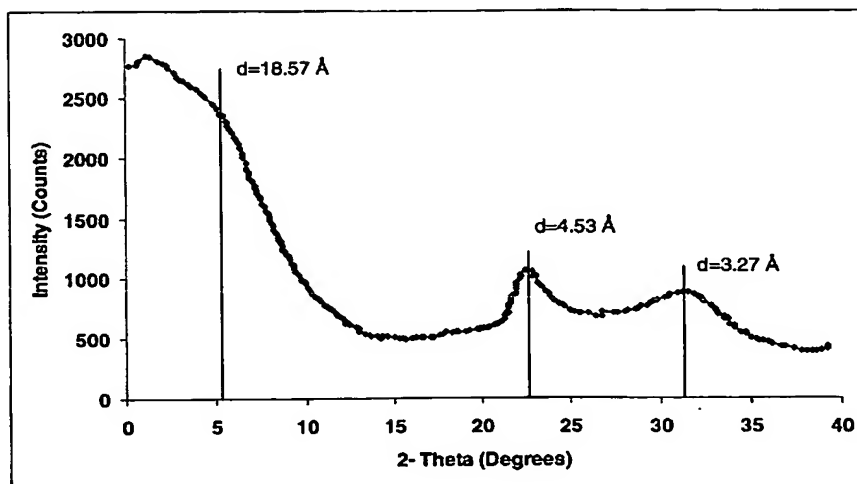
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[Continued on next page]

(54) Title: COMPOSITE OF EXFOLIATED CLAY IN SOOT AND THE PREPARATION THEREOF



(57) Abstract: The present invention relates to a composite of an exfoliated clay pillared in a carbonized matrix. A substantially complete exfoliation of the clay can easily be achieved by first dispersing the in a viscous, high dielectric organic matrix to form a precursor composite, which can then be carbonized to form the composite of the exfoliated clay pillared in a carbonized matrix. The composite is useful as a filler, for example, to enhance the mechanical, thermal, and barrier properties of polymers.

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